

Application No. 09/784,499
Attorney Docket No. 13055US01

REMARKS

The present application includes claims 1-26. Claims 1-26 were rejected. By this Amendment, claims 1-26 have been amended and new claims 27-31 have been added.

With regard to the amendments to the specification, two typographical errors have been corrected. No new matter has been added.

Claims 1-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moy, U.S. Patent Application Publication No. 2003/0035411, in view of Sandstrom, U.S. Patent No. 6,697,373. Moy teaches service discovery using a user device interface to an optical transport network. As described beginning at paragraph [0007] of Moy, a user device interface to an Optical Transport Network (OTN) is provided. The interface enables dynamic provisioning of bandwidth of an OTN. However, as stated by the Examiner in the Office Action, Moy fails to disclose the reservation of virtual concatenated resources in modifying an existing connection.

Sandstrom teaches an automatic method for dynamically matching the capacities of connection in a SDH/SONET network combined with fair sharing of network resources. As shown in Figure 1 and described beginning at Col. 4, Line 28, a SONET ring, N/wk Ring 10, includes a number of packet terminals (PTs) 18. One of the PTs includes a Master Connection Controller (MCC) 20.

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As shown in Figure 2 and described beginning at Col. 4, Line 37, each PT 18 includes an access interface 36 for providing access outside the ring, as well as a N/wk Ring interface east 21 and a N/wk Ring interface east 23 for sending data around the ring. Additionally, each PT 18 includes packet source buffer 33. Specifically, as described beginning at Col. 6, Line 42, each PT 18 includes a dedicated packet source buffer 33 for each for each of the remote PTs on the N/wk ring 10. Each packet source buffer 33 collects all the packets received by the PT 18 that are destined for the remote PT for which the packet source buffer is dedicated.

As described beginning at Col. 5, Line 24, the MCC 20 provides for dynamic adjustment of the capacity of the connections between the PTs 18. More specifically, starting at Col. 5, Line 63, the MCC 20 provides for dynamic adjustment of the capacity of the connections between the PTs 18 by collecting usage statistics for all of the packet source buffers 33 at all of the PTs 18 on the ring at one time, calculating a desired allocation of access and transport capacity to form a cross-connect map (CM) for each PT on the N/wk Ring 10, and then transmitting the CM to each PT on the N/wk ring 10. Each of the PTs on the ring then adjusts its connections in response to the CM.

That is, Sandstrom only teaches modifying virtual concatenated paths in response to usage statistics for all of the PTs in the SONET communication network. Also, Sandstrom only teaches modifying all virtual concatenated paths in the SONET communication network at one time. Sandstrom does not teach modifying individual paths between two PTs, for example. Sandstrom also does not teach modifying and

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virtual concatenated path without first calculating usage statistics for all PTs in the entire SONET communication network.

Conversely, the present claims have been modified to recite a network management system instructing an individual add/drop mux to modify its connection without having to collect usage statistics for all of the PTs on the SONET ring as shown in Sandstrom. Thus, instead of having to spend the additional computation time and effort to calculate usage for the entire SONET network and then adjusting the entire SONET network as taught in Sandstrom, the communication resources of the individual add/drop muxes may be modified as recited in the present claims.

Consequently, neither Moy nor Sandstrom teach forming a virtual concatenated virtual tributary connection without determining usage statistics for all of the nodes on the SONET ring. Moy is silent with regard to the formation of virtual concatenated resources, as acknowledged by the Examiner. Sandstrom requires the usage statistics to be determined for all nodes on the SONET ring and then modifies all nodes on the SONET ring at the same time.

Claims 1-26 include independent claims 1 and 14. Both claims 1 and 14 have been amended to clarify that the connection modification command is formed by the network management system without determining usage statistics for all of the switching circuits in a SONET communication network, which is not taught by the art. Consequently, claims 1 and 14 are respectfully submitted to be allowable. Additionally,

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claims 2-13 and 15-26 depend from claims 1 and 14 and are consequently also respectfully submitted to be allowable.

Additionally, new claims 27-31 have been added. Claims 27-31 recite the above-identified subject matter not taught by Moy or Sandstrom in various permutations. The Examiner is invited to consider the new claims in addition to and/or in favor of claims 1-26. As always, the applicant is open to modification of the claims as suggested by the Examiner.

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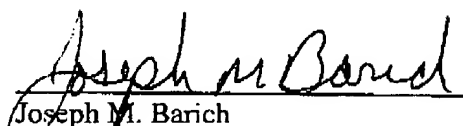
CONCLUSION

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

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